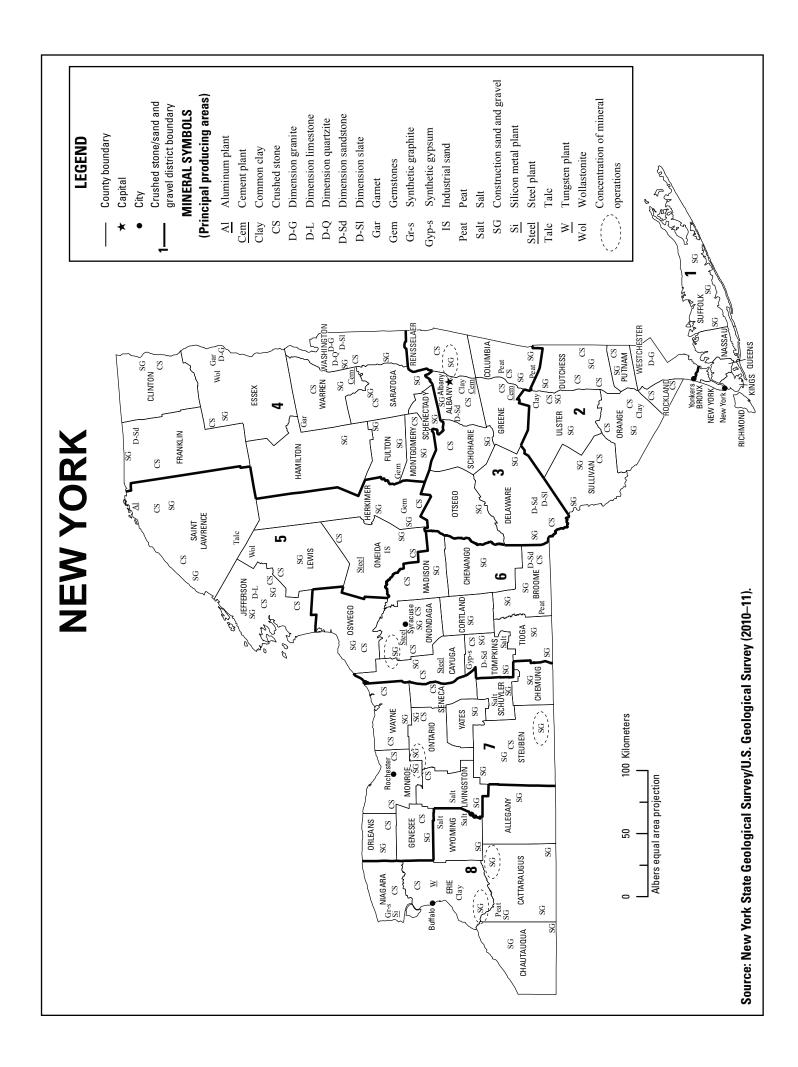


2010-2011 Minerals Yearbook

NEW YORK [ADVANCE RELEASE]



THE MINERAL INDUSTRY OF NEW YORK

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the New York State Geological Survey for collecting information on all nonfuel minerals.

In 2011, New York's nonfuel mineral production was valued at \$1.34 billion, based upon annual U.S. Geological Survey (USGS) data. This was a \$16 million (1.2%) increase from the State's total nonfuel mineral production value of \$1.32 billion in 2010, which followed a \$66 million (4.8%) decrease from \$1.39 billion in 2009. Production in the State first surpassed \$1 billion in 2000 and has done so every year since 2004. Among the 50 States, New York fell slightly in rank to 16th in 2011 from 15th in 2010 in terms of total nonfuel mineral production value. The State accounted for close to 2% of the total U.S. value in 2010 and 2011. On a per capita basis, New York ranked 43d in the Nation in nonfuel mineral production in 2011 with a value of \$69, well below the national average of \$240.

Salt was New York's leading nonfuel mineral commodity by value and represented 34% of the nonfuel production value in both 2010 and 2011, followed by crushed stone (29% in 2010 and 31% on 2011), construction sand and gravel (19%), and portland cement (percentage withheld—proprietary company data). In 2008, the production value of salt overtook that of crushed stone for the first time, and 2010 and 2011 marked the first time that salt had been the top nonfuel mineral by value for two consecutive years.

Of the leading four nonfuel minerals, only the production value of salt increased in 2010, whereas the production values of all but portland cement rose in 2011. In total, the amount of salt produced rose 280,000 metric tons (t) (4.4%), from 2009 to 2011, and the production value increased by \$26 million (6.1%). The quantity of crushed stone produced decreased by 1.8 million metric tons (Mt) (4.8%) and the production value decreased by \$17 million (3.9%) over the same time period, while the quantity and value of construction sand and gravel fell by 819,000 Mt (2.6%), and by \$10 million (3.7%), respectively, from 2009. Portland cement production in 2011 was 8.9% lower than in 2009 by quantity and 12.9% lower by production value (actual values withheld—proprietary company data). The production values of most other nonfuel minerals were also down in 2011 compared to 2009—most notably, the production value of industrial sand and gravel fell almost 97%—but industrial garnet and wollastonite saw modest increases.

New York continued to be the sole producer of wollastonite in 2010 and 2011 and rose to first in rank (by quantity) out of three producing States in industrial garnet production. It remained third out of 16 States in the production of salt (accounting for 14.8% of the total U.S. quantity), and 6th out of 50 States in construction sand and gravel. New York rose to 14th in 2011 from 15th in 2010 in the production of crushed stone. In 2011, the State fell to 11th from 6th in 2009 and 2010 in common clay production, to seventh from sixth in 2009 and 2010 in dimension stone production, and to seventh out of 13 States from fifth in 2009 for peat production (based on sales). New York also produced steel and primary aluminum, feeds for which were obtained from foreign and/or other domestic sources.

^{&#}x27;The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All USGS mineral production data published in this chapter are those available as of May 2013. Data in this report are rounded to three significant digits and percentages are calculated from unrounded data. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at http://minerals.usgs.gov/minerals.

$\label{eq:table 1} \text{NONFUEL MINERAL PRODUCTION IN NEW YORK}^{1,2}$

	2009	9	201	0	201	2011
Mineral	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common	605	30,200	595	30,000	388	16,900
Gemstones, natural	NA	97	NA	97	NA	98
Peat	W	W	W	W	2	W
Salt	6,240	426,000	6,460	442,000	6,520	452,000
Sand and gravel, construction	31,100	267,000 r	30,800	249,000	30,300	257,000
Stone:	_					
Crushed	37,800 ^r	431,000 r	33,900	383,000	36,000	414,000
Dimension	97	28,200	94	25,800	99	17,800
Combined values of cement, garnet (industrial), sand and	=					
gravel (industrial), and values indicated by symbol W	XX	207,000	XX	193,000	XX	182,000
Total	XX	1,390,000 r	XX	1,320,000	XX	1,340,000

^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data. Withheld values included in "Combined values" data. XX Not applicabl ¹Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

²Data are rounded to no more than three significant digits; may not add to totals shown.

NEW YORK: CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE TABLE 2

		2009	6(2010				2011	1	
		Quantity				Quantity				Quantity		
	Number	(thousand	Value	Unit	Number	(thousand	Value	Unit	Number	(thousand	Value	Unit
Type	of quarries	metric tons)	(thousands)	value	of quarries	metric tons)	(thousands)	value	of quarries	metric tons)	(thousands)	value
Limestone ²	т 89	20,300 r	\$216,000 r	\$10.67	99	20,100	\$228,000	\$11.30	64	19,600	\$221,000	\$11.31
Dolomite	16	9,870	114,000	11.51	15	7,310	72,900	86.6	18	8,830	97,800	11.07
Marble	2	96	950	9.85	2	94	1,030	11.04	1	36	392	10.92
Granite	∞	1,090 r	13,300	12.26	6	1,560	23,700	15.16	10	1,730	24,100	13.98
Traprock	3	2,840	45,200	15.96	1	1	1	1	1	1	1	1
Sandstone and quartzite ³	16	2,090 г	23,600 ^r	14.93	17	1,630	19,700	12.10	15	2,400	27,400	11.43
Slate	3	167	1,640	9.85	1	25	276	11.02	1	1	1	;
Miscellaneous stone	39 г	1,610 г	16,800 r	10.49	14	3,110	38,000	12.22	13	3,480	43,200	12.44
Total or average	XX	37,800 г	431,000 r	11.35	XX	33,900	383,000	11.31	XX	36,000	414,000	11.49

Revised. XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown. ²Includes limestone-dolomite reported with no distinction between the two kinds of stone. ³Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

TABLE 3 NEW YORK: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2010, BY USE $^{\rm I}$

Use	Quantity	Value
Construction:	-	
Coarse aggregate (+1½ inch):		
Macadam	169	\$1,600
Riprap and jetty stone	206	3,030
Filter stone	368	3,280
Other coarse aggregate	402	4,730
Coarse aggregate, graded:		
Concrete aggregate, coarse	1,050	11,300
Bituminous aggregate, coarse	1,130	23,800
Bituminous surface-treatment aggregate	87	1,170
Railroad ballast	W	W
Other graded coarse aggregate	3,080	37,300
Fine aggregate (-3/8 inch):		
Stone sand, concrete	203	2,160
Stone sand, bituminous mix or seal	397	4,760
Screening, undesignated	571	5,210
Other fine aggregate	3,330	42,000
Coarse and fine aggregates:		
Graded road base or subbase	690	7,390
Unpaved road surface	116	1,260
Terrazzo and exposed aggregate	W	W
Crusher run or fill or waste	3,470	27,800
Other coarse and fine aggregates	1,620	20,400
Other construction materials	527	5,230
Agricultural, agricultural limestone	163	1,940
Chemical and metallurgical, cement manufacture	1,090	11,600
Other miscellaneous uses and specified uses not listed	W	W
Unspecified: ²		
Reported	5,500	57,600
Estimated	8,520	89,100
Total	33,900	383,000

W Withheld to avoid disclosing company proprietary data; included in "Total."

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Reported and estimated production without a breakdown by end use.

TABLE 4 NEW YORK: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2011, BY USE 1

Use	Quantity	Value
Construction:	-	
Coarse aggregate (+1½ inch):	=	
Macadam	198	2,930
Riprap and jetty stone	626	9,180
Filter stone	51	763
Unspecified coarse aggregate	211	2,790
Coarse aggregate, graded:	-	
Concrete aggregate, coarse	2,670	33,200
Bituminous aggregate, coarse	3,180	43,900
Bituminous surface-treatment aggregate	251	4,230
Railroad ballast	88	1,560
Unspecified graded coarse aggregate	1,140	11,800
Fine aggregate (-3/8 inch):		
Stone sand, concrete	66	933
Stone sand, bituminous mix or seal	877	13,700
Screening, undesignated	778	9,390
Unspecified fine aggregate	1,040	11,400
Coarse and fine aggregates:	-	
Graded road base or subbase	3,110	27,700
Unpaved road surface	108	1,290
Crusher run or fill or waste	4,020	35,900
Unspecified coarse and fine aggregates	638	6,450
Unspecified and other construction materials	20	161
Agricultural, agricultural limestone	143	2,520
Chemical and metallurgical, cement manufacture	660	7,060
Other miscellaneous uses and specified uses not listed	555	6,020
Unspecified: ²		
Reported	8,710	95,200
Estimated	6,900	86,300
Total	36,000	414,000

^TData are rounded to no more than three significant digits; may not add to totals shown.

²Reported and estimated production without a breakdown by end use.

${\it TABLE~5}$ NEW YORK: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2010, BY USE AND DISTRICT 1

	Distric	et 1	Distric	et 2	Distric	t 3
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) ²			343	\$4,150	59	\$861
Coarse aggregate, graded ³			2,330	29,000	734	8,560
Fine aggregate (-3/8 inch) ⁴			2,320	30,600	517	6,420
Coarse and fine aggregates ⁵			1,130	14,500	748	7,990
Other construction materials			W	W		
Agricultural ⁶			W	W		
Chemical and metallurgical ⁷					524	5,600
Other miscellaneous uses and specified uses not listed ⁸						
Unspecified: ⁹						
Reported						
Estimated			801	8,710	2,400	25,800
Total ¹⁰			7,060	88,900	4,980	55,200
	Distric	et 4	Distric	et 5	Distric	t 6
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) ²	228	\$2,370	45	\$490	W	W
Coarse aggregate, graded ³	1,070	10,700	W	W	W	W
Fine aggregate (-3/8 inch) ⁴	546	5,340	W	W	W	W
Coarse and fine aggregates ⁵	1,080	10,100	696	6,010	W	W
Other construction materials			W	W		
Agricultural ⁶	60	697	W	W		
Chemical and metallurgical ⁷	565	6,050				
Other miscellaneous uses and specified uses not listed ⁸						
Unspecified: ⁹						
Reported	220	2,340	1,550	16,200	1,580	\$16,500
Estimated	496	5,560	1,430	16,200	1,160	12,800
Total ¹⁰	4,270	43,100	4,320	45,200	3,090	34,200
	Distric		Distric			
Use	Quantity	Value	Quantity	Value		
Construction:						
Coarse aggregate (+1½ inch) ²	W	W	W	W		
Coarse aggregate, graded ³	W	W	W	W		
Fine aggregate (-3/8 inch) ⁴	W	W	W	W		
Coarse and fine aggregates ⁵	W	W	W	W		
Other construction materials			W	W		
Agricultural ⁶	W	W	W	W		
Chemical and metallurgical ⁷						
Other miscellaneous uses and specified uses not listed ⁸	W	W				
Unspecified: ⁹						
Reported	2,020	\$21,200	131	\$1,390		
Estimated	967	9,880	1,640	13,600		
Total ¹⁰ W Withhold to avoid disclosing company proprietory date	5,050	48,900	4,230	51,600		

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes macadam, riprap and jetty stone, filter stone, and other coarse aggregates.

³Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and other graded coarse aggregates.

⁴Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregate.

⁵Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, roofing granules, and other coarse and fine aggregates.

⁶Includes agricultural limestone, poultry grit and mineral food, and other agricultural uses.

⁷Includes cement manufacture, lime manufacture, dead-burned dolomite manufacture, flux stone, chemical stone, glass manufacture, and sulfur oxide removal. ⁸Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.

⁹Reported and estimated production without a breakdown by end use.

¹⁰District totals may not add up to the published State total, owing to revisions made after the production of the table and/or proprietary data being withheld.

${\it TABLE~6}$ NEW YORK: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2011, BY USE AND DISTRICT $^{\rm I}$

	District	2	District	3	District 4	
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) ²	351	5,730	W	W	466	5,950
Coarse aggregate, graded ³	4,000	56,600	W	W	835	9,170
Fine aggregate (-3/8 inch) ⁴	W	W			347	3,790
Coarse and fine aggregates ⁵	1,170	13,000	W	W	1,080	9,750
Other construction materials	W	W				
Agricultural ⁶	W	W			16	136
Chemical and metallurgical ⁷					660	7,060
Other miscellaneous uses and specified uses not listed ⁸					W	W
Unspecified:9						
Reported	1,240	13,600	1,380	15,100	882	9,630
Estimated	400	4,370	2,330	25,600	550	6,000
Total	8,710	115,000	5,100	54,900	5,070	53,400
<u>-</u>	District		District		District 7	
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate $(+1\frac{1}{2} \operatorname{inch})^2$	80	1,020			W	W
Coarse aggregate, graded ³	W	W			W	W
Fine aggregate (-3/8 inch) ⁴	W	W			W	W
Coarse and fine aggregates ⁵	W	W			W	W
Other construction materials					W	W
Agricultural ⁶	W	W			W	W
Chemical and metallurgical ⁷						
Other miscellaneous uses and specified uses not listed ⁸	W	W				
Unspecified: ⁹						
Reported	1,330	14,500	1,780	19,500	2,100	22,900
Estimated	345	3,770	1,350	14,800	1,000	11,000
Total	3,870	43,200	3,130	34,200	5,530	55,100
<u>-</u>	District					
Use	Quantity	Value				
Construction:						
Coarse aggregate $(+1\frac{1}{2} \operatorname{inch})^2$	W	W				
Coarse aggregate, graded ³	W	W				
Fine aggregate (-3/8 inch) ⁴	W	W				
Coarse and fine aggregates ⁵	W	W				
Other construction materials	W	W				
Agricultural ⁶	W	W				
Chemical and metallurgical ⁷						
Other miscellaneous uses and specified uses not listed ⁸						
Unspecified: ⁹						
Reported						
Estimated	924	20,800				
Total	4,630	58,700				

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

¹Data are rounded to no more than three significant digits; may not add up to totals shown.

²Includes macadam, riprap and jetty stone, filter stone, and other coarse aggregates.

³Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and other graded coarse aggregates.

⁴Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregate.

⁵Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, roofing granules, and other coarse and fine aggregates.

⁶Includes agricultural limestone, poultry grit and mineral food, and other agricultural uses.

⁷Includes cement manufacture, lime manufacture, dead-burned dolomite manufacture, flux stone, chemical stone, glass manufacture, and sulfur oxide removal.

⁸Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.

⁹Reported and estimated production without a breakdown by end use.

TABLE 7 NEW YORK: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2010, BY MAJOR USE CATEGORY $^{\rm I}$

	Quantity		
Use Concrete aggregate (including concrete sand) Plaster and gunite sands Concrete products (blocks, bricks, pipe, decorative, etc.) Asphaltic concrete aggregates and other bituminous mixtures Road base and coverings ² Fill Snow and ice control Railroad ballast Filtration Other miscellaneous uses Unspecified: ³ Reported Estimated Total or average	(thousand	Value	Unit
Use	metric tons)	(thousands)	value
Concrete aggregate (including concrete sand)	3,960	\$37,000	\$9.34
Plaster and gunite sands	168	1,740	10.36
Concrete products (blocks, bricks, pipe, decorative, etc.)	87	315	3.62
Asphaltic concrete aggregates and other bituminous mixtures	1,320	11,800	8.94
Road base and coverings ²	3,560	24,600	6.91
Fill	1,070	4,670	4.36
Snow and ice control	894	5,300	5.93
Railroad ballast		13	6.50
Filtration	37	263	7.11
Other miscellaneous uses	88	592	6.73
Unspecified: ³			
Reported	2,750	26,000	9.45
Estimated	16,700	136,000	8.14
Total or average	30,800	249,000	8.08

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

TABLE 8 NEW YORK: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2011, BY MAJOR USE CATEGORY $^{\rm I}$

	Quantity		
	(thousand	Value	Unit
Use	metric tons)	(thousands)	value
Concrete aggregate (including concrete sand)	4,840	\$50,700	\$10.48
Plaster and gunite sands	251	2,280	9.08
Concrete products (blocks, bricks, pipe, decorative, etc.)	13	112	8.62
Asphaltic concrete aggregates and other bituminous mixtures	1,290	11,800	9.15
Road base and coverings ²	3,860	25,000	6.48
Fill	1,250	5,900	4.72
Snow and ice control	906	5,600	6.18
Filtration	21	142	6.76
Other miscellaneous uses ³	142	872	6.14
Unspecified: ⁴			
Reported	2,050	21,400	10.44
Estimated	15,700	133,000	8.47
Total or average	30,300	257,000	8.48

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Includes road and other stabilization (cement and lime).

³Reported and estimated production without a breakdown by end use.

²Includes road and other stabilization (cement and lime).

³Includes railroad ballast.

⁴Reported and estimated production without a breakdown by end use.

TABLE 9 NEW YORK: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2010, BY USE AND DISTRICT $^{\rm l}$

	Distric	et 1	Distric	et 2	Distric	et 3
Use	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products ²	W	W	204	\$2,890	786	\$7,160
Asphaltic concrete aggregates and road base materials ³	W	W	254	3,570	W	W
Fill	4	\$42	44	434	308	1,230
Snow and ice control	3	106	22	418	223	1,420
Other miscellaneous uses ⁴			25	273	17	104
Unspecified: ⁵						
Reported	1,260	13,200	124	1,940	16	133
Estimated	1,190	7,420	1,820	15,100	798	6,540
Total ⁶	3,610	34,100	2,500	24,600	3,300	25,300
	Distric	t 4	Distric	et 5	Distric	et 6
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products ²	285	\$1,690	253	\$1,910	396	\$3,670
Asphaltic concrete aggregates and road base materials ³	396	2,070	453	3,420	852	5,380
Fill	345	792	79	323	W	W
Snow and ice control	130	662	123	502	130	604
Other miscellaneous uses ⁴	1	5	6	43	23	175
Unspecified: ⁵						
Reported	3	43	155	1,190	178	1,360
Estimated	1,740	14,300	818	6,800	3,530	29,200
Total ⁶	2,900	19,500	1,890	14,200	5,210	40,900
	Distric		Distric			
	Quantity	Value	Quantity	Value		
Concrete aggregates and concrete products ²	498	\$4,060	739	\$5,830		
Asphaltic concrete aggregates and road base materials ³	948	6,610	733	4,960		
Fill	123	920	65	384		
Snow and ice control	156	832	107	766		
Other miscellaneous uses ⁴	18	136	37	133		
Unspecified: ⁵						
Reported	805	6,260	206	1,910		
Estimated	3,030	25,200	3,760	31,200		
Total ⁶	5,580	44,000	5,650	45,200		

W Withheld to avoid disclosing company proprietary data; included in "Other miscellaneous uses." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes plaster and gunite sands.

³Includes road and other stabilization (cement and lime).

⁴Includes filtration and railroad ballast.

⁵Reported and estimated production without a breakdown by end use.

⁶District totals may not add up to the published State total, owing to revisions made after the production of the table and/or proprietary data being withheld.

TABLE 10 NEW YORK: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2011, BY USE AND DISTRICT $^{\rm 1}$

	Distric	et 1	Distric	t 2	Distric	t 3
Use	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products ²	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials ³	W	W	W	W	W	W
Fill	57	813	186	1,280	227	927
Snow and ice control	1	9	121	1,310	218	1,490
Other miscellaneous uses ⁴			11	160	13	86
Unspecified: ⁵						
Reported	222	3,850	143	2,320	59	422
Estimated	509	4,350	1,550	13,200	600	5,020
Total	2,830	34,800	2,530	25,200	2,930	21,300
	Distric		Distric		Distric	
Use	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products ²	277	1,970	258	1,810	600	6,210
Asphaltic concrete aggregates and road base materials ³	439	2,130	435	3,010	903	6,220
Fill	319	809	121	407	203	1,050
Snow and ice control	68	275	99	425	183	777
Other miscellaneous uses ⁴	1	5	20	140	16	118
Unspecified: ⁵						
Reported	8	64	124	1,230	453	3,860
Estimated	1,730	14,300	593	5,070	3,610	30,200
Total	2,850	19,600	1,650	12,100	5,970	48,500
	Distric		Distric			
Use	Quantity	Value	Quantity	Value		
Concrete aggregates and concrete products ²	591	5,290	433	3,470		
Asphaltic concrete aggregates and road base materials ³	1,020	6,950	913	6,770		
Fill	52	279	80	332		
Snow and ice control	115	606	101	704		
Other miscellaneous uses ⁴	23	164	81	341		
Unspecified: ⁵						
Reported	725	6,390	311	3,240		
Estimated	3,320	28,400	3,770	32,200		
Total	5,850	48,100	5,690	47,100		

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes plaster and gunite sands.

³Includes road and other stabilization (cement and lime).

⁴Includes filtration and railroad ballast.

⁵Reported and estimated production without a breakdown by end use.